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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT

I. HEADING

DATE: July 5, 2001

SUBJECT: **POLREP for the Dead Creek Sediment Removal Site, Sauget, St. Clair County, Illinois**

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POLREP #: POLREP #1 - PRP Lead

II. BACKGROUND

Response Authority:	CERCLA
NPL Status:	Non-NPL
Latitude:	38°34'37"N
Longitude:	90°10'47"W
State Notification:	November, 2000
Start Date:	November, 2000
Completion Date:	December 31, 2001 (anticipated)

III. SITE INFORMATION

A. Incident Category

Sediment removal from a creek bed.

B. Site Description

1. Site location

The Dead Creek site is located within Sauget and Cahokia, Illinois, roughly between Illinois Highway 3 and Falling Springs Road. The northern boundary starts at Queeny Avenue, flows past Illinois Highway 157, and empties into the Old Prairie du Pont Creek, which is a tributary to the Mississippi River. The site is bordered to the north by the Solutia Industrial site as well as several other industrial sites; to the east and west by residential or commercial property; and to the south by a park, wetlands and primarily undeveloped property.

2. Description of threat

It has been determined that the contaminated sediments from the creek create a hazardous situation for the residents living near the site. A variety of organic and inorganic constituents were found in the water and sediments tested from Dead Creek and Site M. The list of constituents consists of 39 semi-volatile organic compounds, 10 volatile organic compounds, 20 metals, and polychlorinated biphenyls (PCBs). The number of, as well as the concentrations of the constituents, is generally higher in the northern portions of Dead Creek. Five metals, barium, copper, lead, nickel, and zinc were found in all segments of the creek at levels greater than 100 ppm. PCB was also found in all segments at levels greater than 1 ppm. Sediment toxicity was observed in all but the most southern segment of Dead Creek.

3. Site background

In 1928, an easement agreement was executed between local property owners and representatives for other interests to improve drainage in the area and make Dead Creek suitable for the disposal of various waters. As a result, Dead Creek received discharges from local businesses and the Village of Sauget for many years. Prior to the installation of public sewers in the Village of Sauget in the early 1930's, industrial process wastewater from Sauget and East St. Louis flowed directly into Dead Creek. Six source areas believed to contain greater than 400,000 cubic yards of wastes from various sources are located within Dead Creek's headwaters. These source areas are described as two closed municipal/industrial landfills, a closed disposal area that was covered by the U.S. EPA in 1995, a backfilled wastewater impoundment, a former borrow pit, and a backfilled borrow pit.

Illinois EPA (IEPA) divided Dead Creek into six segments (A-F) during a 1988 investigation. Segment A is not part of the Time Critical Removal Action. Segment B extends south from Queeny Avenue to Judith Lane. The culvert at Judith Lane was blocked in 1965 to prevent water from flowing downstream. Site M, which was not part of IEPA's division of Dead Creek in 1988, is located along the eastern side of Dead Creek at the western end of Walnut Street. In the 1940's, Site M was constructed as a sand borrow pit and contains approximately 3,600 cubic yards of contaminated sediments. Creek Segment C extends south from Judith Lane to Cahokia Street. Segment D runs south from Cahokia Street to Jerome Lane. Creek Segment E runs south from Jerome Lane to Illinois Highway 157. Segment F extends from Highway 157 to Old Prairie du Pont Creek. Segment F is the widest portion of Dead Creek. Samples of water and sediment from Creek Segments B-F and Site M collected in the 1980's, 1990's and 2000 indicated the presence of a variety of organic and inorganic constituents.

IV. SITE INFORMATION

A. Situation

1. Response activities to date

Work began on the site in November 2000 with preparations for installing the creek bypass system consisting of a 12" pipe running the length of Dead Creek. To install the pipe, it was necessary to excavate through streets and place culverts under them. The sections of pipe were put together and pumps and pump stations were installed. Sediment traps were installed in all segments of the creek. This was followed by cleaning out the culverts where the creek was covered and then the creek bypass system was started. After the creek bypass system was operating, brush and debris were removed from the creek starting with Segment B. Safety fences were installed around the creek from Segment B to near Parks College in Segment E. After this, the debris removed from the creek was stockpiled. A low-flow channel was dug in Segments D-F collect the water in the middle of the creek and allow the sediments near the sides of the creek to dry. About this same time, grading of the site for the TSCA cell was begun. When the grading of the cell site was

completed, clean fill was brought in and used to begin construction of the cell walls. Riprap was placed in the bottom of the cell. Sediments from Site M were stockpiled in a containment area in Segment B for drying and a carbon treatment system was installed to filter water being pumped from Site M.

B. Planned Removal Activities

An estimated 50,000 cubic yards of contaminated sediment will be removed from the creek and transferred to a TSCA cell that is being constructed just northwest of where Dead Creek passes underneath Judith Street.

C. Next Steps

- Continue construction of side walls of the TSCA cell, install additional riprap and gravel, and install the liner.
- Complete removal of sediments from Site M and construct side slope stabilization using clean fill. Complete grading of area near Site M to control future flooding.
- After the TSCA cell is completed, begin placing sediments from Site M and Segment B into the cell.
- Continue dewatering the channel.

D. Key Issues

Wet weather has slowed work on the TSCA cell and removal of sediments from Site M. The last full week of May and the second and fourth weeks of June were extremely rainy and have pushed the scheduled completion of the cell back until mid August. Crews are currently working 12-hour days Monday through Friday and 10-hour days on Saturdays in an attempt to bring the completion of the cell to early August.

V. COSTS

This removal action is being performed by a PRP under the direction of the U.S. EPA. At this time, the U.S. EPA is not knowledgeable of the costs associated with this removal action.